

Amendments to the Claims:

Before claim 1, insert --We claim:--

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) Electric heating device, in particular as supplemental heating for motor vehicles, with several heating elements, ~~(2)~~ comprising: a heater block, and a control unit for controlling the heating elements ~~(2)~~, whereby the control unit forms one structural unit with the heater block and exhibits power transistors ~~(+9)~~ arranged on a printed circuit board ~~(+0)~~ and cooling elements allocated to these power transistors and one cooling element each is connected through an opening ~~(23)~~ in the printed circuit board ~~(+0)~~ to the respective power transistor ~~(+9)~~,

~~characterized in that~~ wherein

the cooling element is formed from a cooling body ~~(25)~~ and a heat-conducting element ~~(24)~~ insertable into the opening ~~(23)~~ of the printed circuit board ~~(+0)~~.

2. (Currently Amended) Electric heating device according to Claim 1, ~~characterized in that~~ wherein the heat-conducting element ~~(24)~~ is glued to the cooling body ~~(25)~~.

3. (Currently Amended) Electric heating device according to Claim 2, ~~characterized in that~~ wherein the glue ~~(28)~~ used to glue the heat-conducting element ~~(24)~~ and the cooling body ~~(25)~~ produces an electric insulation of the heat-conducting element ~~(24)~~ and the cooling body ~~(25)~~.

4. (Currently Amended) Electric heating device according to Claim 1, ~~characterized in that wherein~~ the heat-conducting element (24) is made of copper.

5. (Currently Amended) Electric heating device according to Claim 1, ~~characterized in that wherein~~ the cooling body (25) is made of aluminum.

6. (Currently Amended) Electric heating device according to Claim 1, ~~characterized in that wherein~~ the mass of the heat-conducting element (24) is very much smaller than that of the cooling body (25).

7. (Currently Amended) Electric heating device according to Claim 1, ~~characterized in that wherein~~ the opening (23) provided for in the printed circuit board (10) and the heat-conducting element (24) are essentially cylindrically formed.

8. (Currently Amended) Electric heating device according to Claim 1, ~~characterized in that wherein~~

the cooling body (25) has an essentially flat section (26) with an opening (29),

the heat-conducting element (30) protrudes through the opening (29) in the flat section (26) of the cooling body (25), and

the heat-conducting element (30) has at least one lateral projection (30a) on the end protruding through the cooling body (25) and out of the latter for mechanical fastening of the cooling body (25).

9. (Currently Amended) Electric heating device according to Claim 8, ~~characterized in that wherein~~ the lateral projection (30a) is a bulb laterally fitting around the protruding end of the heat-conducting element (30).
10. (Currently Amended) Electric heating device according to Claim 1, ~~characterized in that wherein~~ the cooling bodies (25) are arranged in the heating device such that the air to be heated can be blown around them via window openings (7) provided for in a housing of the heating device.
11. (Currently Amended) Electric heating device according to Claim 1, ~~characterized in that wherein~~ the surface of the cooling bodies (25) is provided on the outside with an electrically insulating coating (34).
12. (Currently Amended) Electric heating device according to Claim 11, ~~characterized in that wherein~~ the surface of the cooling bodies (25) is provided with an electrically insulating coating (34) essentially only in the region opposite the window openings (7).
13. (Currently Amended) Electric heating device according to Claim 2, ~~characterized in that wherein~~ the glue (28) is an epoxy resin glue, a silicon glue or an acrylic glue.
14. (Currently Amended) Electric heating device according to Claim 1, ~~characterized in that wherein~~ the heat-conducting element (24), as the distance from the power transistor (19) increases, has a larger cross-section area.
15. (Currently Amended) Electric heating device according to Claim 14, ~~characterized in that wherein~~ the heat-conducting element (24) is essentially formed cylindrically.

16. (Currently Amended) Electric heating device according to Claim 15, ~~characterized in that wherein~~ the section (34) of the heat-conducting element (24) arranged in the opening (29) of the printed circuit board (10) has an essentially conical shape growing smaller in the direction of the end in contact with the power transistor (19).

17. (Currently Amended) Electric heating device according to Claim 16, ~~characterized in that wherein~~ the section (34) of the heat-conducting element (24) arranged in the opening (29) of the printed circuit board (10) has radial projections (35) for mechanical fastening of the heat-conducting element (24) in the opening (29) of the printed circuit board (10).

18. (Currently Amended) Electric heating device according to Claim 1, ~~characterized in that wherein~~ the cooling body (25) comprises an essentially rectangular cross-section with a first section (26) arranged parallel to the printed circuit board (10) and a second section (36-38) arranged vertically thereto.

19. (Currently Amended) Electric heating device according to Claim 18, ~~characterized in that wherein~~ the first section (26) of the cooling body (25) has recesses (28a-28c) on the side facing the printed circuit board (10) for accommodating the end of the heat-conducting element (24) protruding from the printed circuit board (10).

20. (Currently Amended) Electric heating device according to Claim 18, ~~characterized in that wherein~~ the cooling bodies (25) of several adjacent cooling elements are formed in one piece.

21. (Currently Amended) Electric heating device according to Claim 20, ~~characterized in that wherein~~ the cooling bodies (25) formed in one piece are connected to each other via the first section (26).

22. (New) An electric heating device comprising:
a heater block having a plurality of heating elements, and
a control unit that forms a single structural unit with the heater block and that controls the heating elements, the control unit including a plurality of power transistors arranged on a printed circuit board and a plurality of cooling elements, each of which is allocated to a respective one of the power transistors, wherein
each of the cooling elements is connected through an opening in the printed circuit board to the associated power transistor, and wherein
each of the cooling elements is formed from a cooling body and a heat-conducting element inserted into the opening of the printed circuit board.
23. (New) The electric heating device according to Claim 22, wherein the heat-conducting element of each of the cooling elements is glued to the associated cooling body.
24. (New) The electric heating device according to Claim 22, wherein the heat-conducting element of each of the cooling elements is made of one of copper and aluminum.
25. (New) The electric heating device according to Claim 22, wherein
the cooling body of each of the cooling elements has an essentially flat section with an opening formed therein, wherein
the heat-conducting element of each of the cooling elements protrudes through the opening in the flat section of the associated cooling body, and wherein
the heat-conducting element of each of the cooling elements has at least one lateral projection on the end protruding through the associated cooling body and out of the latter for mechanical fastening of the associated cooling body to the printed circuit board.
26. (New) The electric heating device according to Claim 22, further comprising a housing that contains the heating device and that has window openings formed therein, and wherein the

cooling bodies are arranged in the heating device such that air to be heated can be blown around them via the window openings in the housing.

27. (New) The electric heating device according to Claim 22, wherein an outside surface of each of the cooling bodies is provided with an electrically insulating coating.

28. (New) The electric heating device according to Claim 22, wherein a cross-sectional area of each of the cooling bodies increases as the distance from the associated power transistor increases.

29. (New) the electric heating device according to Claim 22, wherein each of the cooling bodies is essentially rectangular in cross-section with a first section extending at least generally parallel to the associated printed circuit board and a second section extending at least generally perpendicularly therefrom.